Prepared by:

DISTRICT HEALTH BOARD EMPLOYED WORKFORCE QUARTERLY REPORT

1 APRIL TO 30 JUNE 2021

Health Workforce Information

The Health Workforce Information Programme (HWIP) is a well-established programme within Technical Advisory Services (TAS) and supports the District Health Boards (DHBs) through providing base information on DHB employee demographics, competencies and describing the current composition of the DHB workforce. Regular reports are based on a quarterly collection of data from the DHBs. DHB employee data has been collected on a quarterly basis since mid-2006 with a continued focus on improving data quality.

Purpose of the Report

This report covers all DHB employees for the period 1 April 2021 to 30 June 2021 and is a snapshot in time at 30 June 2021. The report provides information on the general make up and characteristics of the DHB health and disability workforce to help inform further data analysis and workforce planning. The format of the report is to provide tables and graphs on the demographics of the DHB workforce aligned to the seven occupational groupings. These groupings are:

- Senior Medical Officer (SMO)
- Resident Medical Officer (RMO)
- Nursing
- Midwifery
- Allied & scientific (the amalgamation of Allied Health and Technical and Scientific)
- Care and support
- Corporate and other

Data Extraction

Important notes about the data extraction:

- The data extract used for this report covers the period April 2021 to June 2021 inclusive and is a snapshot taken by the DHBs on 30 June 2021.

- The data quality continues to improve through working closely with the DHBs to help manage and improve the data submitted.

Disclaimer

While due care has been applied in the processing, analysing and extraction of data and information to ensure the accuracy of the work, TAS provides no warranty as to the accuracy, authenticity or validity of the data and information and/or that it is supplied free from error. TAS is not liable whatsoever, including for negligence or defamation, for all and any damages or liability in respect of or arising out of use, reliance or otherwise for this work, whether direct or indirect, including the provision of any incorrect, inaccurate or incomplete information.

Contact: HWIP@tas.health.nz
Data source: DHB Workforce Information, held by TAS.

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OVERVIEW

DHB WORKFORCE AT A GLANCE

For data to 30 June 2021, only those employed with contracted hours greater than zero are included in the analysis except for the tables and charts that explicitly report on 'Other' employees on page 5. 'Other' includes those on maternity / parental leave, and those who have not been reported with an employment status code.

Total employees 80,596 in 81,774 positions* 63,090 female > 17,500 male****	**68,775 FTE 52,636 FTE** females 16,136 FTE** males**	**Largest occupation group: Nurses – 30,496 employees in 31,085 positions Smallest occupation group: Midwives – 1,496 employees in 1,568 positions**
DHB employee average age 45.0 years 45.1 years for females 44.7 years for males	**Oldest male occupation group: SMO (mean age 51.4 years) Youngest male occupation group: RMO (mean age 31.2 years)**	**Oldest female occupation groups: Corporate and other (mean age 50.0 years) Youngest female occupation group: RMO (mean age 30.8 years)**
Mean FTE rate 0.85 per employee Mean FTE rate for females 0.83 Mean FTE rate for males 0.92	**Longest Length of Service occupation group SMO (mean 10.1 years) Shortest Length of Service occupation group RMO (mean 1.5 years)**	**Employee reported ethnicities: Other*** – 64.6% Asian – 22.3% Māori – 8.5% Pacific – 4.6%**

*   The count of employees is a distinct count of individual employees. These employees may hold more than one role, so the Headcount quoted in this report (which is based on total number of positions) will often be larger.

**   Contracted FTE (using a 2086 hour annual contract):

N.B. local (DHB and / or occupation) interpretations of a 'full time equivalent' can vary. For example; a sonographer may be classed as 1.0 full time employee in one DHB where they are contracted to work 35 hours per week, whereas another sonographer in a different DHB may be classed as 1.0 full time employee where they are contracted to work 40 hours per week. The Contracted FTE definition used here allows a comparison to be made across DHBs and occupations through a universal standard.

***   To allow direct comparisons with reported ethnicity data from Statistics New Zealand, we have amalgamated ethnicities not associated with Asian, Māori or Pacific into the group 'Other'.

****   There were fewer than five employees reported as gender diverse.

DISTRIBUTION OF EMPLOYEES

This chart shows the number of employees (a distinct count of employee numbers) within each DHB who are classed as either Employees (contracted hours greater than zero) or 'Other' (all others including those on maternity / parental leave, and those who have not been reported with an employment status code). If an individual has already been included in the Employed total but also holds a casual contract, they have not been counted again in the Others column. The chart has been ordered in descending order of DHB workforce size. The table below the chart gives the actual count of employees.

Figure 1: Count of individual employees
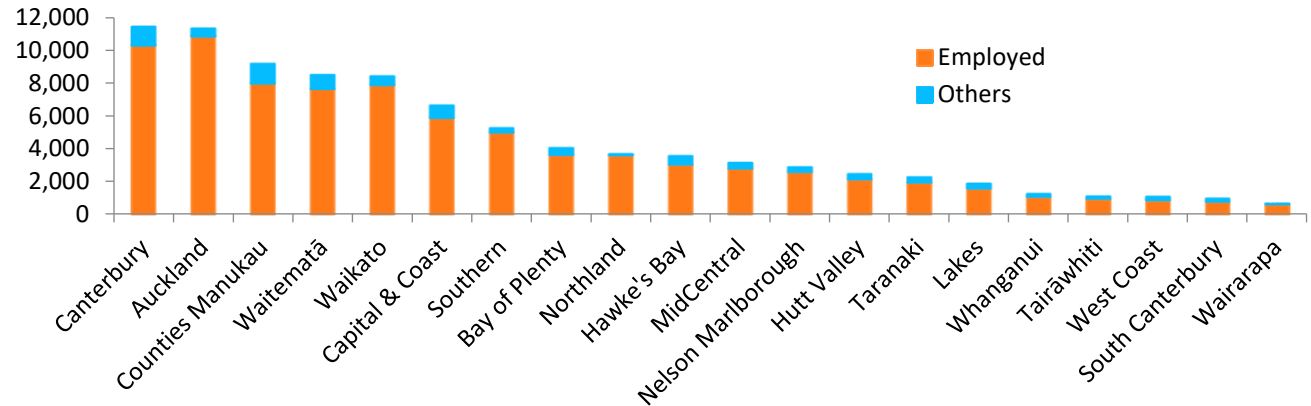
Table 1: Distribution of employment types

DHB	Employed	Others	Total	Proportion of DHB workforce
Canterbury	10,276	1,155	11,431	12.8%
Auckland	10,825	518	11,343	12.7%
Counties Manukau	7,951	1,237	9,188	10.3%
Waitematā	7,621	875	8,496	9.5%
Waikato	7,878	551	8,429	9.4%
Capital & Coast	5,858	773	6,631	7.4%
Southern	4,969	281	5,250	5.9%
Bay of Plenty	3,597	445	4,042	4.5%
Northland	3,579	82	3,661	4.1%
Hawke's Bay	3,012	526	3,538	4.0%
MidCentral	2,773	361	3,134	3.5%
Nelson Marlborough	2,570	296	2,866	3.2%
Hutt Valley	2,103	311	2,414	2.7%
Taranaki	1,914	342	2,256	2.5%
Lakes	1,554	296	1,850	2.1%
Whanganui	1,028	197	1,225	1.4%
Tairāwhiti	923	157	1,080	1.2%
West Coast	841	214	1,055	1.2%
South Canterbury	742	188	930	1.0%
Wairarapa	582	70	652	0.7%
Grand Total	**80,596**	**8,875**	**89,471**	**100.0%**

NOTE: In prior quarters, this table was based on a count of positions, which had the potential to count individual employees more than once if they held multiple positions with a DHB. Individuals may still be counted more than once if they hold positions with multiple DHBs.

INCLUSIONS AND EXCLUSIONS

Specific caveats and definitions relevant to charts and tables have been provided throughout the report and should be noted. Additionally, all charts and tables that follow in this document are derived from data using the following caveats:

Inclusions:

- Only employees who have positive contract hours have been included; those with zero contract hours or are classified as on parental leave or leave without pay have been excluded.
- Charts containing 'Age' include all employees who have a calculated age between 15 and 99.

Exclusions:

- Data has been excluded when it does not match the reporting variable standard format (i.e. if a gender code has not been assigned then the employee will be excluded from that chart or table).
- For privacy reasons some data has been suppressed for numbers less than five.
- Any employee who has an employment end date entered (before or during the reporting quarter) has also been excluded since they left employment before the end of the reporting quarter.
- Charts containing 'ethnicity', exclude employees who do not have a valid ethnicity code.

Calculations:

- Percentage sick leave hours is calculated by dividing the number of sick leave hours taken by the contracted hours (excluding those with zero contracted hours). It excludes staff who started or terminated employment in the reporting quarter.
- Annual leave balance to entitlement calculations exclude staff who started or terminated employment in the reporting quarter and those staff who have no reported entitlement to annual leave.
- Because of the way start dates are reported the length of service is most likely to be based on the length of service within the DHB rather than the length of service of the reported position. When a person is reported under multiple positions for a single occupation group, the greatest length of service value is used for the individual.

EMPLOYEE COUNT AND FTE BY DHB AND OCCUPATION GROUP

The following table shows the distinct count of employees by their occupation grouping and DHB. It also includes columns for full-time equivalent counts (Contracted FTE, using a 2086 hour annual contract) and mean FTE (the average FTE calculation for all employees). Employees who do not have a contract of more than zero hours are excluded.

Table 2: Employee count and FTE by DHB and occupation group

DHB	Nursing			Corporate and other			Allied & scientific			Care and support			SMO			RMO			Midwifery		
	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE	Employee count	FTE	Mean FTE
Auckland	3,892	3,372.5	0.87	2,116	1,911.9	0.90	2,149	1,916.6	0.89	744	689.6	0.93	1,122	944.4	0.84	649	641.7	0.99	175	133.7	0.76
Bay of Plenty	1,439	1,094.4	0.76	745	645.4	0.87	539	453.5	0.84	346	287.9	0.83	259	214.8	0.83	214	212.4	0.99	55	36.9	0.67
Canterbury	3,879	3,210.4	0.83	2,281	2,002.4	0.88	1,722	1,428.3	0.83	1,033	821.8	0.80	656	554.9	0.85	560	549.9	0.98	145	97.6	0.67
Capital & Coast	2,360	1,996.9	0.85	1,258	1,169.9	0.93	804	708.2	0.88	475	418.5	0.88	458	373.6	0.82	414	401.5	0.97	107	80.5	0.75
Counties Manukau	3,013	2,619.7	0.87	1,463	1,265.9	0.87	1,226	1,095.1	0.89	966	856.6	0.89	621	531.9	0.86	475	463.3	0.98	202	156.8	0.78
Hawke's Bay	1,129	873.9	0.77	672	585.6	0.87	479	407.7	0.85	346	275.7	0.80	171	143.1	0.84	178	175.9	0.99	49	36.4	0.74
Hutt Valley	717	573.6	0.80	454	407.1	0.90	315	262.9	0.83	231	198.2	0.86	164	123.2	0.75	179	172.4	0.96	43	28.9	0.67
Lakes	610	479.7	0.79	371	333.7	0.90	196	164.2	0.84	140	117.7	0.84	109	95.0	0.87	90	90.0	1.00	38	28.7	0.75
MidCentral	1,141	933.5	0.82	636	586.9	0.92	404	357.1	0.88	192	160.4	0.84	176	157.6	0.90	169	168.5	1.00	55	38.5	0.70
Nelson Marlborough	826	635.6	0.77	603	500.4	0.83	368	287.4	0.78	485	351.5	0.72	157	126.6	0.81	92	90.7	0.99	52	39.4	0.76
Northland	1,376	1,034.9	0.75	699	588.8	0.84	513	434.2	0.85	528	355.0	0.67	228	220.0	0.96	149	146.8	0.99	86	47.7	0.55
South Canterbury	320	254.1	0.79	147	124.9	0.85	110	86.9	0.79	67	47.2	0.70	55	48.5	0.88	24	23.9	1.00	23	17.7	0.77
Southern	2,066	1,637.6	0.79	1,005	893.4	0.89	727	620.8	0.85	422	316.4	0.75	341	300.1	0.88	342	330.4	0.97	66	43.6	0.66
Tairāwhiti	372	296.2	0.80	217	196.7	0.91	130	109.6	0.84	90	77.3	0.86	60	53.1	0.88	33	32.8	0.99	21	16.0	0.76
Taranaki	727	532.3	0.73	445	390.3	0.88	264	212.0	0.80	199	164.7	0.83	145	120.7	0.83	100	96.8	0.97	34	23.1	0.68
Waikato	3,003	2,535.0	0.84	1,711	1,541.1	0.90	1,139	994.9	0.87	943	784.9	0.83	481	430.3	0.89	484	477.9	0.99	117	83.9	0.72
Wairarapa	248	188.1	0.76	154	121.0	0.79	66	50.4	0.76	52	33.2	0.64	30	27.0	0.90	14	14.0	1.00	20	14.3	0.71
Waitematā	2,639	2,290.5	0.87	1,472	1,291.5	0.88	1,356	1,180.7	0.87	1,044	919.7	0.88	575	489.9	0.85	388	378.5	0.98	170	117.5	0.69
West Coast	303	253.2	0.84	228	191.3	0.84	94	83.0	0.88	155	110.7	0.71	36	27.2	0.76	9	8.5	0.95	16	11.4	0.71
Whanganui	436	350.2	0.80	209	187.9	0.90	137	111.7	0.82	118	97.4	0.83	56	50.4	0.90	50	50.0	1.00	22	16.2	0.74
Grand Total	**30,496**	**25,162.2**	**0.83**	**16,886**	**14,936.3**	**0.88**	**12,738**	**10,965.3**	**0.86**	**8,576**	**7,084.4**	**0.83**	**5,900**	**5,032.1**	**0.85**	**4,613**	**4,525.9**	**0.98**	**1,496**	**1,069.0**	**0.71**

TABLES AND CHARTS BY OCCUPATION GROUPING

EMPLOYEE COUNT AND FTE BY OCCUPATION GROUPING AND GENDER

The bars represent the distinct count (left hand axis) of employees by gender and occupation grouping, and the triangles represent the average FTE for those employees (right hand axis), also by gender and occupation grouping. As some employees may have roles across multiple Occupation Groups, they may be counted more than once in the group totals, but only once in the Total Staff row in Table 3.

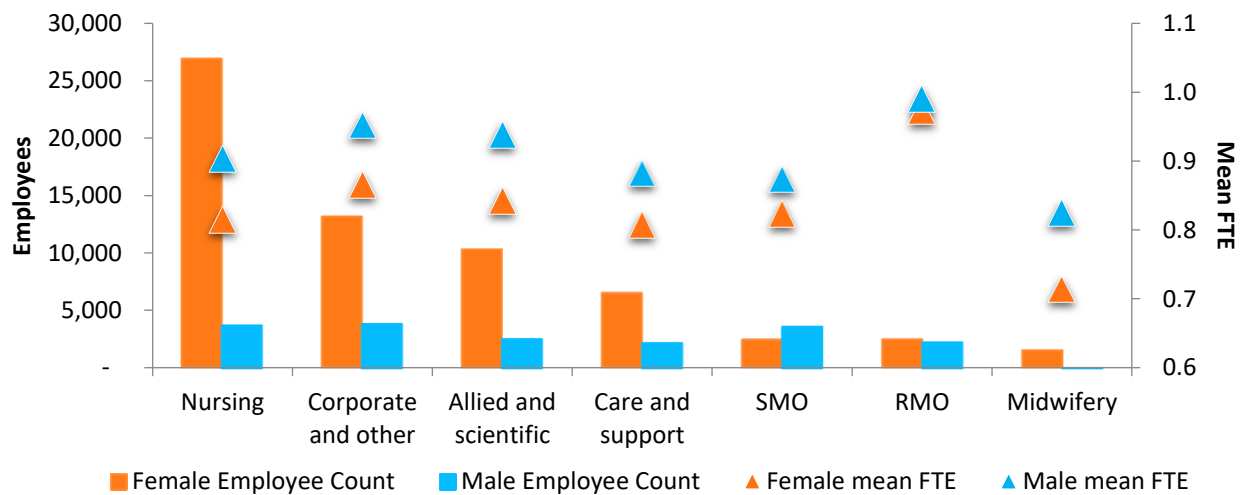**Figure 2: Occupation group distinct employee count and mean FTE by gender**

Table 3: Occupation group employee count and mean FTE by gender

	Female		Male		Total	
Occupation group	**Employee Count**	**Mean FTE**	**Employee Count**	**Mean FTE**	**Employee Count**	**Mean FTE**
Nursing	26,894	0.81	3,608	0.90	30,496	0.83
Corporate and other	13,160	0.87	3,725	0.95	16,886	0.88
Allied and scientific	10,300	0.84	2,438	0.94	12,738	0.86
Care and support	6,477	0.81	2,097	0.88	8,576	0.83
SMO	2,414	0.82	3,486	0.87	5,900	0.85
RMO	>2,440	0.97	<2,175	0.99	4,613	0.98
Midwifery	<1,495	0.71	**	0.83	1,496	0.71
Total Staff	**63,090**	**0.83**	**>17,500**	**0.92**	**80,596**	**0.85**

** Data suppressed (headcounts less than 5)
Some values have been expressed as ranges to ensure anonymity of the small number of employees reported as gender diverse.
Values in the Total Staff line are slightly lower than the sum of the Occupation Groups, as some individuals may be represented in more than once Occupation Group.

EMPLOYEE COUNT BY OCCUPATION GROUP AND ETHNICITY

This chart shows the proportion (not the actual count of employees) of ethnicities reported within each occupation group. The table below details the distinct count of employees for whom an ethnicity was reported. As some employees may have roles across multiple Occupation Groups, they may be counted more than once in the group totals, but only once in the Grand Total row in Table 4.

The pie chart, on the next page, shows the distribution of all reported ethnicities for all DHBs.

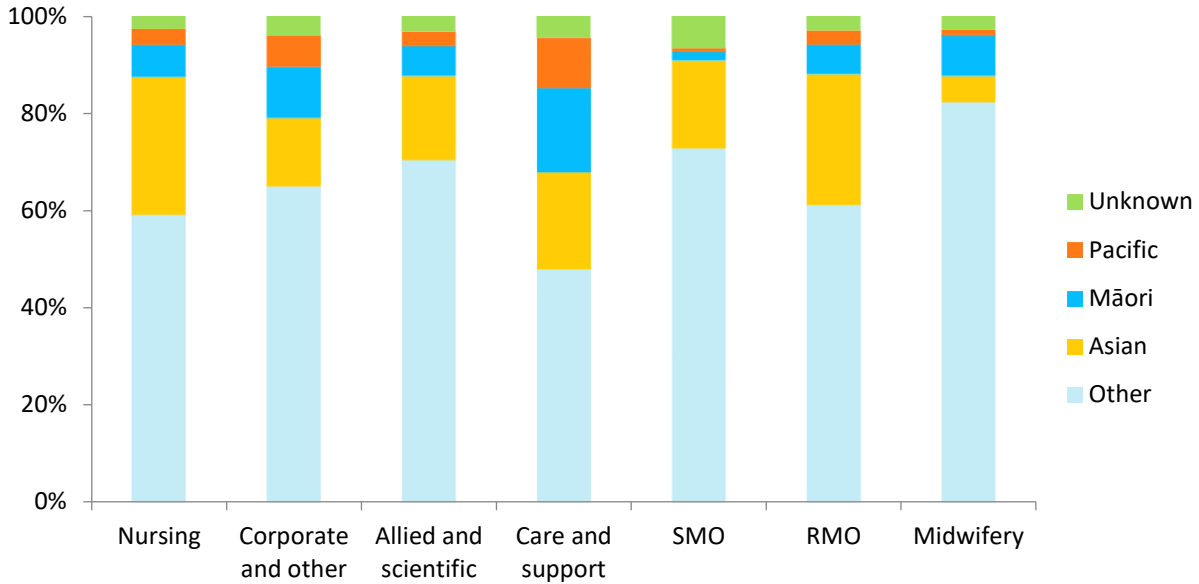**Figure 3: Proportion of ethnicities by occupation group**

Table 4: Employee Count and proportion of ethnicities by occupation group

Occupation group	Other*		Asian		Māori		Pacific		Unknown		Total
Nursing	18,005	59.0%	8,661	28.4%	2,033	6.7%	1,016	3.3%	781	2.6%	30,496
Corporate and other	10,959	64.9%	2,387	14.1%	1,781	10.5%	1,108	6.6%	651	3.9%	16,886
Allied and scientific	8,958	70.3%	2,201	17.3%	804	6.3%	383	3.0%	392	3.1%	12,738
Care and support	4,111	47.9%	1,712	20.0%	1,488	17.4%	893	10.4%	372	4.3%	8,576
SMO	4,294	72.8%	1,061	18.0%	117	2.0%	47	0.8%	381	6.5%	5,900
RMO	2,820	61.1%	1,239	26.9%	285	6.2%	135	2.9%	134	2.9%	4,613
Midwifery	1,230	82.2%	80	5.4%	126	8.4%	19	1.3%	41	2.7%	1,496
Grand Total	50,306	62.4%	17,327	21.5%	6,623	8.2%	3,594	4.5%	2,746	3.4%	80,596

* 'Other' is a group amalgamation of all ethnicities that do not fall into the groups Asian, Māori or Pacific.

This pie chart is based on the 77,850 permanent distinct employees who declared their ethnicity as Asian, Māori, Pacific or Other. Below this is a similar pie chart of ethnicity proportions in the New Zealand population based on projections of population data by Statistics New Zealand for 30 June 2021.

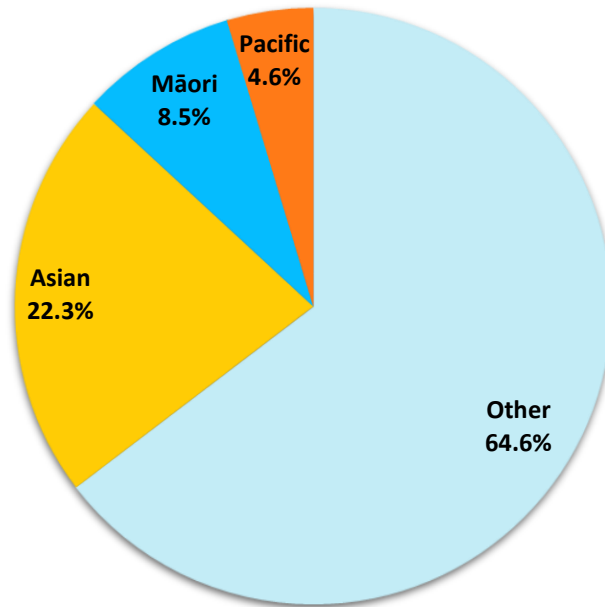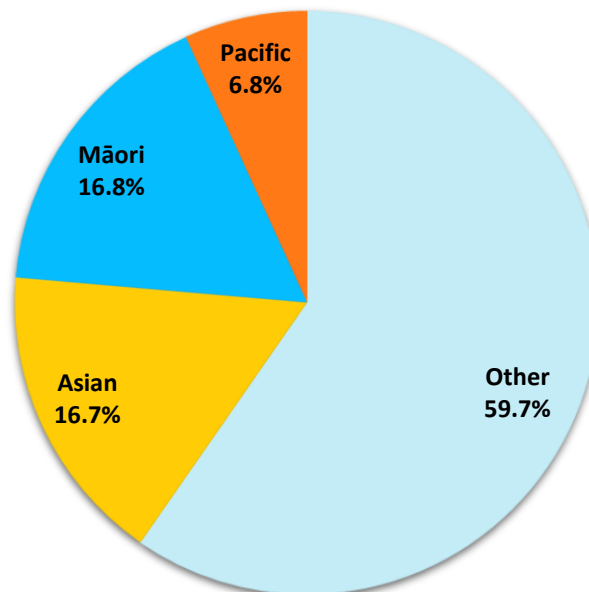**Figure 4: Proportion of identifiable ethnicities for all DHB employees**

Figure 5: Proportion of identifiable ethnicities for projected population data at 30 June 2021

AGES AND LENGTH OF SERVICE

Figure 6: Mean ages and length of service by occupation group and gender

The bars in this chart show the average age (left hand axis) for each occupation group by gender. The triangles represent the average length of service (right hand axis), also by occupation group and gender.
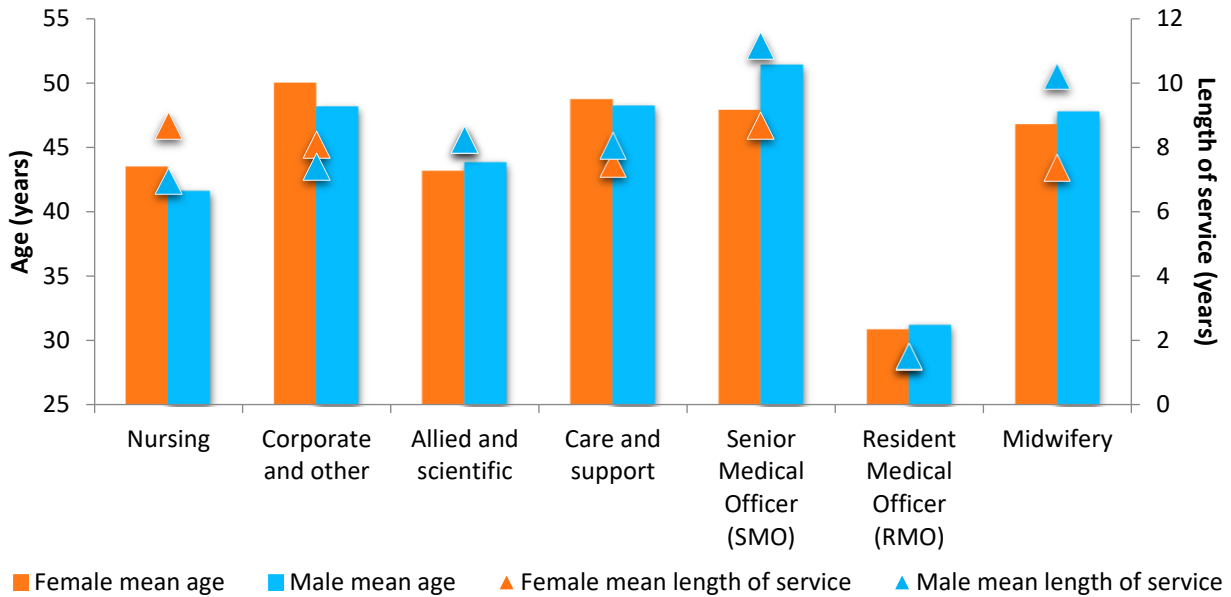
The following table gives the actual figures behind the chart above.

Table 5: Mean ages and length of service by occupation group and gender

Occupation group	Female		Male		Total	
	Mean length of service	Mean age	Mean length of service	Mean age	Mean length of service	Mean age
Nursing	8.7	43.5	7.0	41.6	8.5	43.3
Corporate and other	8.1	50.0	7.4	48.1	7.9	49.6
Allied and scientific	8.2	43.2	8.2	43.8	8.2	43.3
Care and support	7.5	48.7	8.0	48.2	7.6	48.6
SMO	8.7	47.9	11.1	51.4	10.1	50.0
RMO	1.5	30.8	1.5	31.2	1.5	31.0
Midwifery	7.4	46.8	10.2	47.8	7.4	46.8
Grand Total	**8.7**	**45.1**	**7.5**	**44.7**	**7.9**	**45.0**

TABLES AND CHARTS BY DHB

This section looks at the same statistics given in the first section but broken down by DHB rather than occupation group. Page 7 has a table of figures for FTE and headcount which looks at both DHB and occupation grouping.

EMPLOYEE COUNT AND MEAN FTE BY GENDER AND DHB

This chart examines the distinct count of employees by gender and DHB (left hand axis). The DHBs have been ordered in descending size of employee count. The right-hand axis refers to the mean FTE for all positions (by DHB and gender). The following table shows the employee count and mean FTE by gender for each DHB.

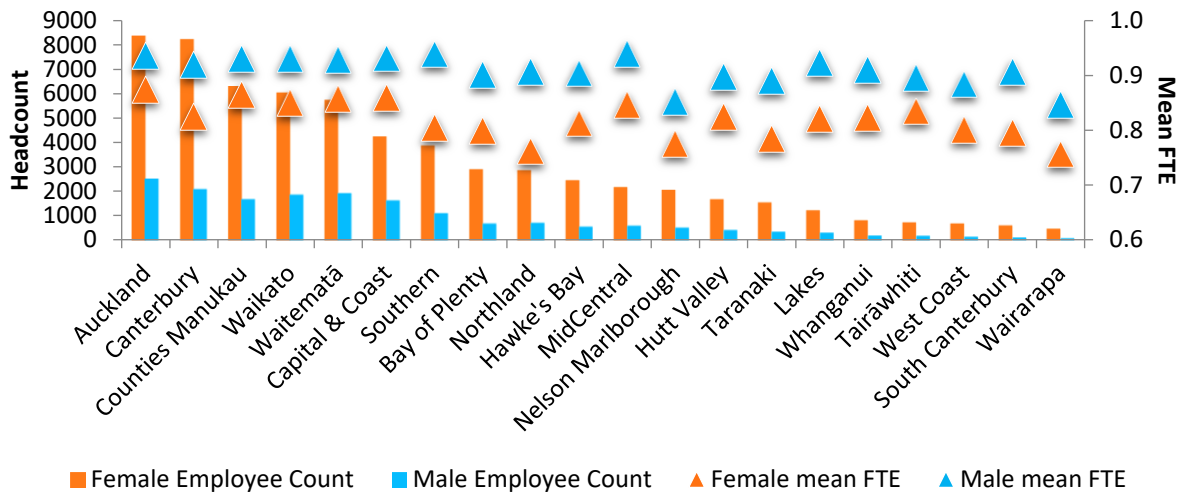**Figure 7: Employee Count and mean FTE by gender and DHB**

Table 6: Employee Count and mean FTE by gender and DHB

		Auckland	Canterbury	Counties Manukau	Waikato	Waitematā	Capital & Coast	Southern	Bay of Plenty	Northland	Hawke's Bay	MidCentral	Nelson Marlborough	Hutt Valley	Taranaki	Lakes	Whanganui	Tairāwhiti	West Coast	South Canterbury	Wairarapa
Female	Employees	8,353	8,216	6,292	6,038	5,732	4,249	3,883	2,911	2,872	2,454	2,184	2,062	1,678	1,555	1,232	830	740	694	622	493
	Mean FTE	0.87	0.82	0.87	0.85	0.86	0.86	0.80	0.80	0.76	0.81	0.85	0.78	0.83	0.78	0.82	0.82	0.84	0.80	0.80	0.76
Male	Employees	2,469	2,060	1,659	1,840	1,889	1,609	1,086	686	707	558	589	508	425	359	322	197	183	147	120	89
	Mean FTE	0.94	0.92	0.93	0.93	0.93	0.93	0.94	0.90	0.91	0.90	0.94	0.85	0.90	0.89	0.92	0.91	0.90	0.88	0.91	0.85
Total	Employees	10,825	10,276	7,951	7,878	7,621	5,858	4,969	3,597	3,579	3,012	2,773	2,570	2,103	1,914	1,554	1,028	923	841	742	582
	Mean FTE	0.89	0.84	0.88	0.87	0.87	0.88	0.83	0.82	0.79	0.83	0.87	0.79	0.84	0.80	0.84	0.84	0.85	0.81	0.81	0.77

MEAN AGES AND MEAN LENGTH OF SERVICE BY DHB AND GENDER

This chart shows the mean age of employees in each DHB by gender (left hand axis) and has been ordered by descending average age. The triangles represent the average length of service (right hand axis) by gender and DHB. This has been calculated on an employee count basis, using the maximum reported length of service for each individual staff member across all relevant roles.

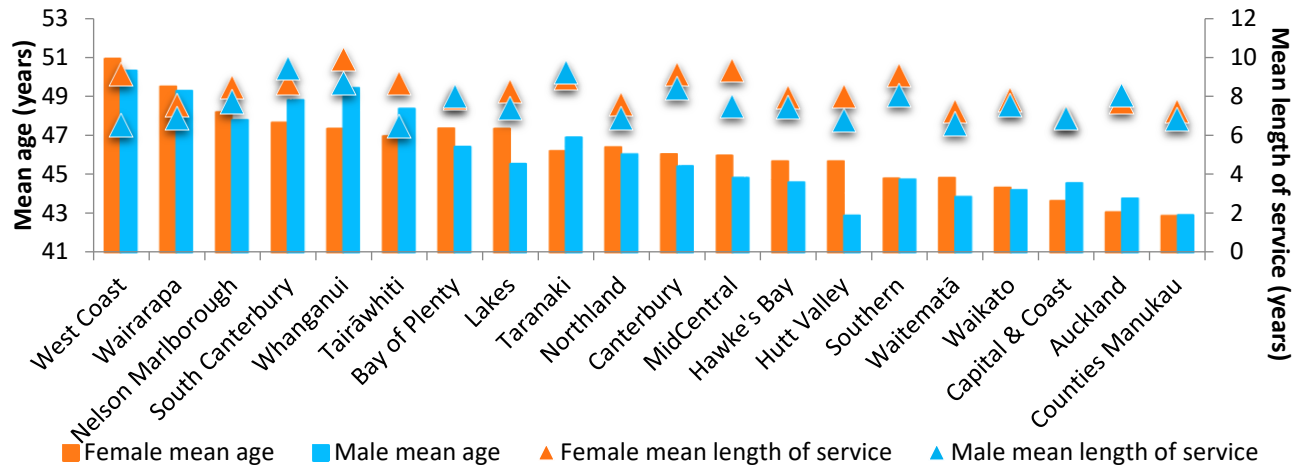**Figure 8: Mean ages and mean length of service by DHB and gender**

Table 7: Mean ages and mean length of service by DHB and gender

DHB	Female mean length of service	Female mean age	Male mean length of service	Male mean age	All staff mean length of service	All staff mean age
West Coast	9.2	50.9	6.5	50.3	8.7	50.8
Wairarapa	7.6	49.5	6.9	49.3	7.5	49.5
Nelson Marlborough	8.4	48.2	7.7	47.8	8.3	48.1
South Canterbury	8.7	47.6	9.5	48.8	8.8	47.8
Whanganui	9.9	47.3	8.7	49.4	9.7	47.7
Tairāwhiti	8.7	47.0	6.4	48.3	8.2	47.2
Bay of Plenty	7.9	47.3	8.0	46.4	7.9	47.2
Lakes	8.2	47.3	7.4	45.5	8.1	47.0
Taranaki	8.9	46.2	9.2	46.9	9.0	46.3
Northland	7.6	46.4	6.9	46.0	7.4	46.3
Canterbury	9.2	46.0	8.4	45.4	9.0	45.9
MidCentral	9.4	46.0	7.5	44.8	9.0	45.7
Hawke's Bay	8.0	45.7	7.5	44.6	7.9	45.5
Hutt Valley	8.0	45.7	6.7	42.9	7.8	45.1
Southern	9.1	44.8	8.1	44.7	8.9	44.8
Waitematā	7.2	44.8	6.6	43.9	7.1	44.6
Waikato	7.8	44.3	7.5	44.2	7.8	44.3
Capital & Coast	6.9	43.6	6.8	44.5	6.9	43.9
Auckland	7.7	43.1	8.0	43.8	7.8	43.2
Counties Manukau	7.2	42.9	6.8	42.9	7.1	42.9
Grand Total	**8.1**	**45.1**	**7.5**	**44.7**	**7.9**	**45.0**

ETHNICITIES BY DHB

The following chart shows the proportion of ethnicities within each DHB employee population (ordered by descending proportion of 'unknown' ethnicities). It does not represent the actual number of people by each ethnicity; this is detailed in the table further below.

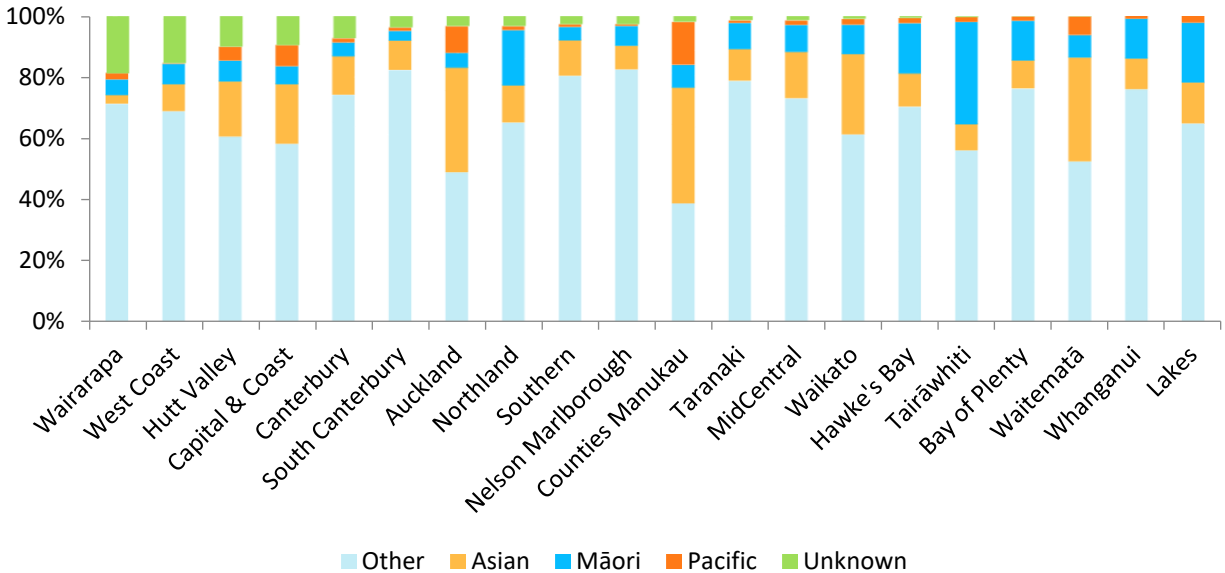**Figure 9: Proportion of reported ethnicities by DHB**

Table 8: Distribution of reported ethnicities by DHB and Employee Count

DHB	Other*	Asian	Māori	Pacific	Unknown	Total
Wairarapa	415	18	<35 ***	<15 ***	107	582
West Coast	579	76	<60 ***	**	127	841
Hutt Valley	1,273	384	144	93	209	2,103
Capital & Coast	3,413	1,153	347	395	550	5,858
Canterbury	7,634	1,307	463	133	739	10,276
South Canterbury	611	72	24	8	27	742
Auckland	5,311	3,705	524	932	353	10,825
Northland	2,333	441	644	45	116	3,579
Nelson Marlborough	3,998	581	218	40	132	4,969
Southern	2,118	203	167	15	67	2,570
Counties Manukau	3,087	3,020	587	1,107	150	7,951
MidCentral	1,507	201	164	15	27	1,914
Taranaki	2,026	423	246	39	39	2,773
Waikato	4,828	2,079	757	141	73	7,878
Hawke's Bay	2,118	335	488	51	20	3,012
Tairāwhiti	517	82	307	<15 ***	**	923
Bay of Plenty	2,743	338	465	<50 ***	**	3,597
Waitematā	4,004	2,594	558	<465 ***	**	7,621
Whanganui	782	105	132	9	0	1,028
Lakes	1,009	210	302	33	0	1,554
Grand Total	**50,306**	**17,327**	**6,623**	**3,594**	**2,746**	**80,596**

 * 'Other' is a group amalgamation of all ethnicities that do not fall into the groups Asian, Māori or Pacific.

 ** Data suppressed (headcounts less than 5)

 *** Data anonymised as range to protect data suppression in other fields.

ANALYSIS BY DHB AND OCCUPATION GROUP

LENGTH OF SERVICE BY OCCUPATION GROUP AND DHB

The following table shows the mean length of service for each occupation group by DHB. To read this table, look at the occupation column. The green colours represent a longer than national average length of service, the yellow colours are close to the national average while red colours are lower than the national average. The final column (all staff) has ordered the DHBs by longer to shorter lengths of service.   Length of service is based on reported time employed in the current position, so if an employee is reported with multiple positions, this metric picks up the maximum length of service across their positions.

Table 9: Mean length of service by occupation group and DHB

DHB	Nursing	Corporate and other	Allied and scientific	Care and support	SMO	RMO	Midwifery	All staff
Whanganui	10.3	9.5	11.1	9.6	9.8	1.2	10.3	9.7
Canterbury	9.9	7.9	9.5	9.4	11.3	2.4	9.4	9.0
Taranaki	9.7	9.5	9.1	9.7	7.9	1.6	7.1	9.0
MidCentral	10.2	8.8	8.6	8.2	10.6	1.6	7.3	9.0
Southern	10.1	8.7	8.7	7.6	10.8	2.4	8.7	8.9
South Canterbury	9.5	8.9	8.4	9.8	7.9	1.1	6.6	8.8
West Coast	9.8	6.7	9.1	10.3	5.7	1.8	7.9	8.7
Nelson Marlborough	9.7	7.3	7.9	8.2	10.4	1.4	6.6	8.3
Tairāwhiti	9.8	7.3	7.8	7.7	8.1	1.0	5.8	8.2
Lakes	9.1	8.4	8.3	6.9	8.3	1.6	6.8	8.1
Bay of Plenty	8.9	8.3	7.2	7.3	9.5	1.7	7.4	7.9
Hawke's Bay	8.2	8.0	8.5	7.3	9.8	1.7	8.5	7.9
Auckland	7.7	7.8	8.2	8.2	10.8	0.9	7.0	7.8
Waikato	8.3	8.0	8.3	6.7	10.1	2.1	6.4	7.8
Hutt Valley	8.5	8.5	7.8	8.7	8.9	0.9	6.8	7.8
Wairarapa	9.0	5.3	8.6	8.1	8.1	0.3	3.3	7.5
Northland	7.9	8.5	8.4	5.2	8.3	1.3	7.1	7.4
Counties Manukau	7.1	8.2	7.1	6.8	10.2	0.8	7.5	7.1
Waitematā	7.1	6.9	8.0	6.7	10.0	0.8	6.6	7.1
Capital & Coast	7.1	6.8	6.8	7.6	10.3	1.3	7.4	6.9
Grand Total	**8.5**	**7.9**	**8.2**	**7.6**	**10.1**	**1.5**	**7.4**	**7.9**

ANALYSIS BY SICK LEAVE & ANNUAL LEAVE

SICK LEAVE BY DHB, OCCUPATION GROUP, AGE GROUP AND ETHNICITY BY GENDER

The following radar chart shows the dispersion of sick leave by DHB by looking at the average annualised sick leave hours per contracted FTE. It is based on all contracted employees not on long term leave and excluding those who commenced employment during the reporting quarter, regardless of the amount of sick leave taken during this reporting quarter. The process of annualising the quarter's reported sick leave hours may amplify the impact of outlier events, whether these are negative values (reported to correct an over-statement in a previous quarter) or a potential over-reporting, where a person reportedly took more sick leave than we would expect them to have worked based on their contracted FTE.

To read this graph, the blue line indicates the median (50%) sick leave hours per FTE; i.e. 50% of staff took sick leave hours (per FTE) at or below this value. The yellow line indicates the 3rd quartile (75%) sick leave hours per FTE; i.e. 75% of staff took sick leave hours (per FTE) at or below this value. The order of least sick leave hours per FTE to the most sick leave hours per FTE taken runs clockwise from 12 o'clock.

For example, the data for Southern shows that (if the June quarter is indicative) 50% of staff would have taken 42 hours sick leave or less (note comments on negative sick leave values above) per FTE over the course of a year, and 75% of staff would have taken 106.7 hours or less of sick leave per FTE over the course of a year.

Figure 10: Average annualised sick leave hours per FTE by DHB

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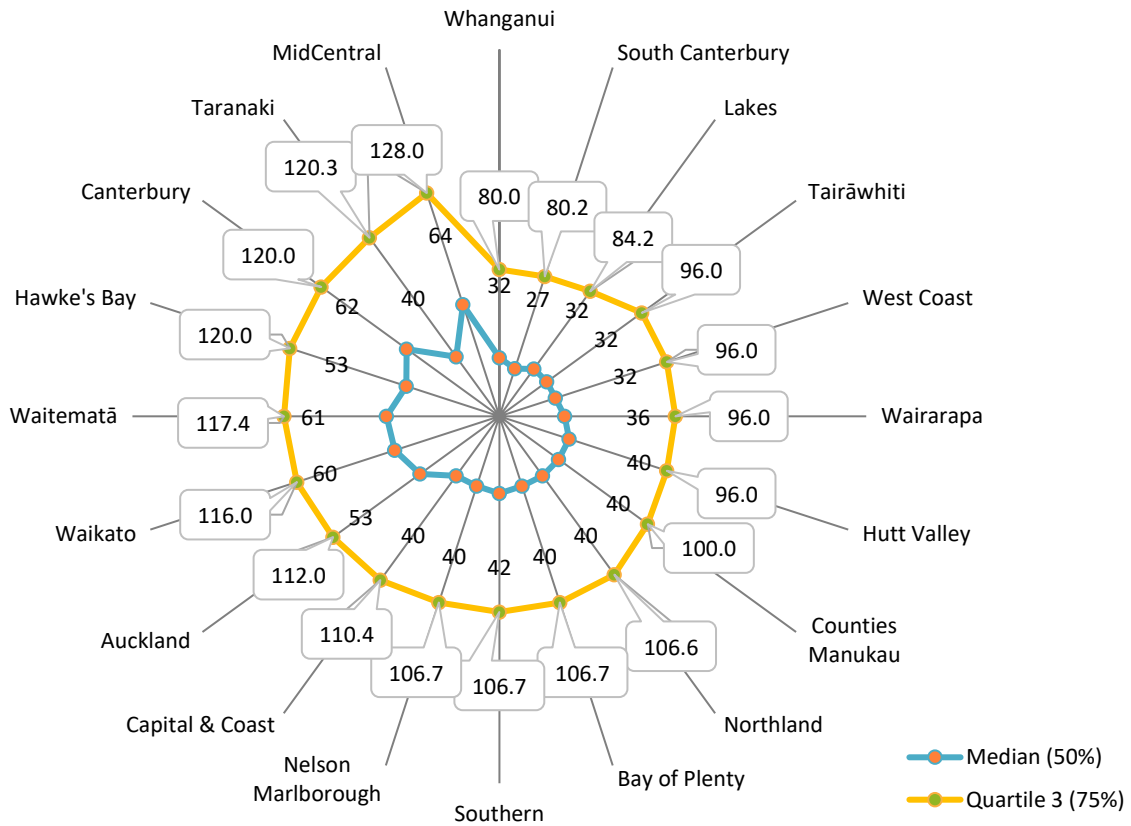
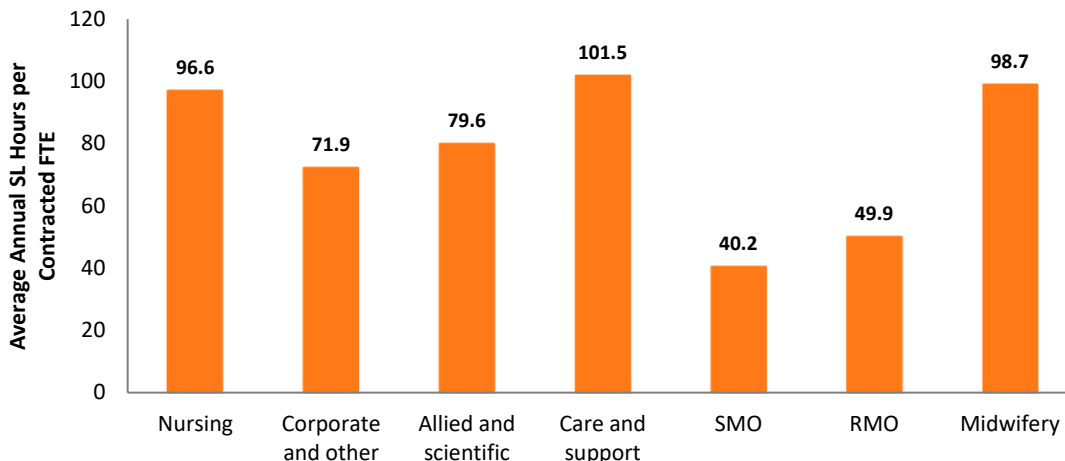**Figure 11: Average annual sick leave hours per FTE by occupational group**

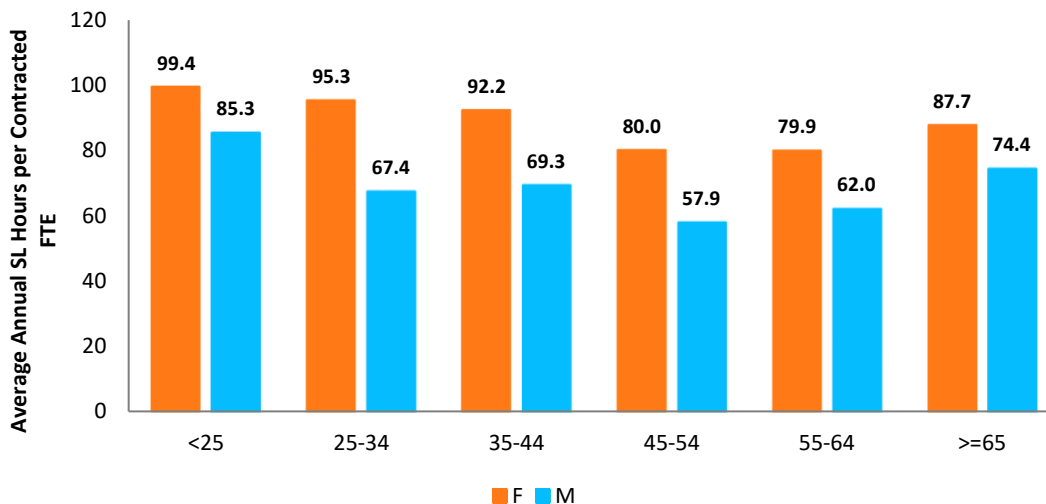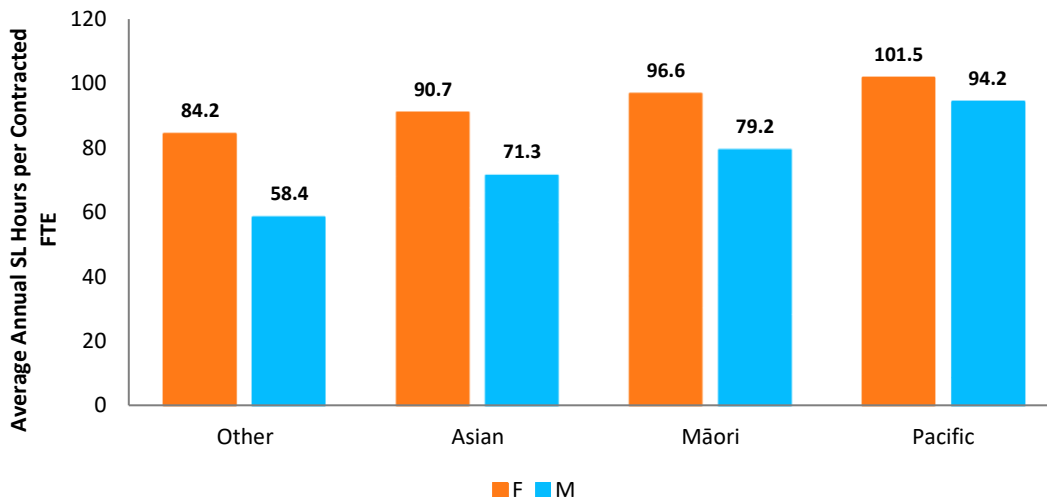**Figure 12: Average annual sick leave hours per FTE by age group by gender**

Figure 13: Average annual sick leave hours per FTE by ethnicity by gender

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RATIO OF ANNUAL LEAVE BALANCE AND ANNUAL LEAVE ENTITLEMENT BY DHB, OCCUPATION GROUP AND ETHNICITY BY GENDER

In the first chart, the bars represent the ratios of annual leave balance to annual leave entitlement and the blue dotted line represents the national average. For example, a value of 100% means that on average the DHB employees have an annual leave balance equal to their annual leave entitlement. The chart shows that for the first twelve DHBs, on average their employees have more annual leave balance than annual leave entitlement.

The other two charts on page 19 display the ratio of annual leave balance to entitlement per FTE at the national level, grouped by both Occupation Group and Ethnicity (with gender split).

Figure 14: Ratio of annual leave balance to annual leave entitlement hours per FTE by DHB
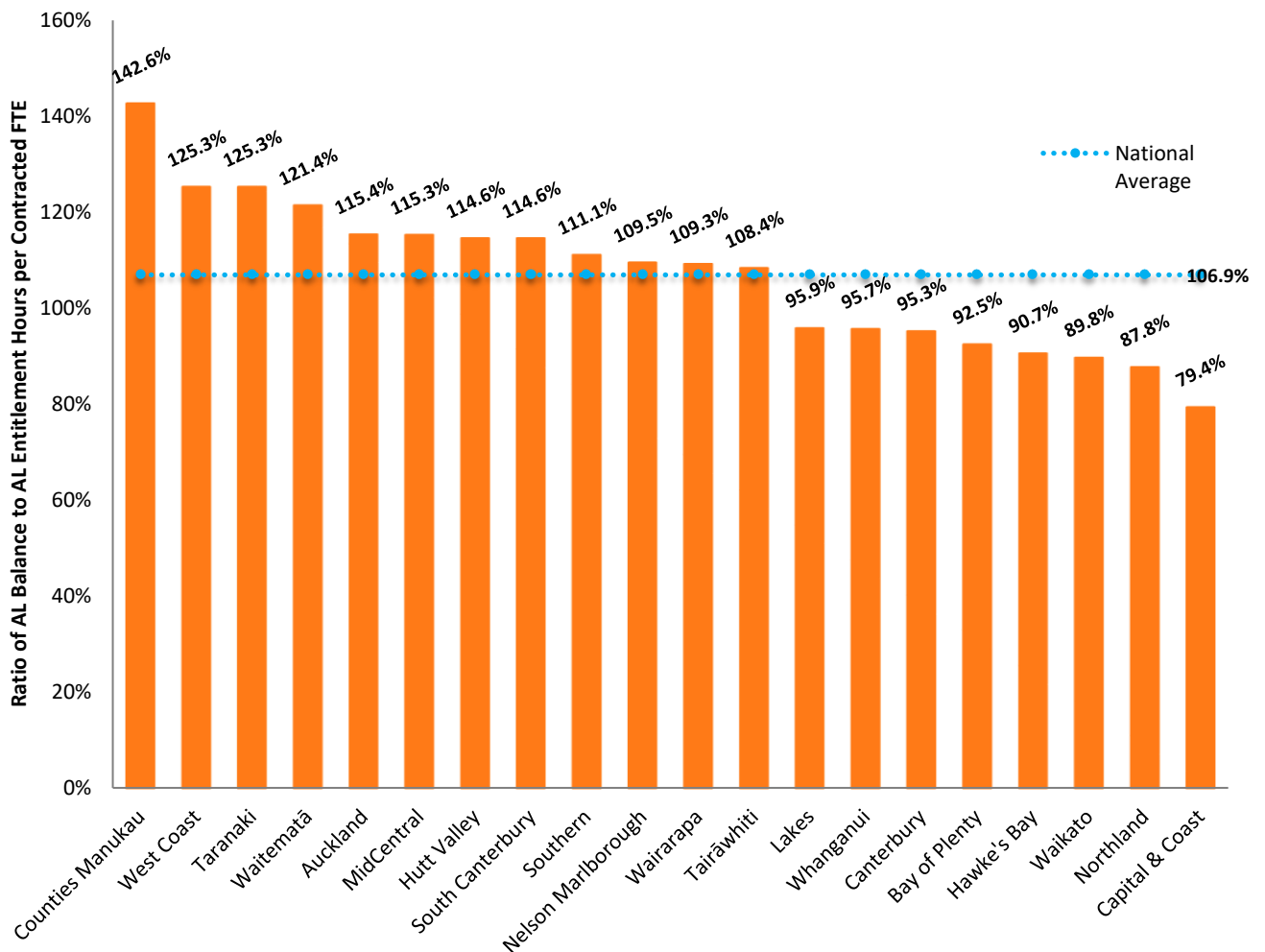
Figure 15: Ratio of annual leave balance to annual leave entitlement hours per FTE by occupational group
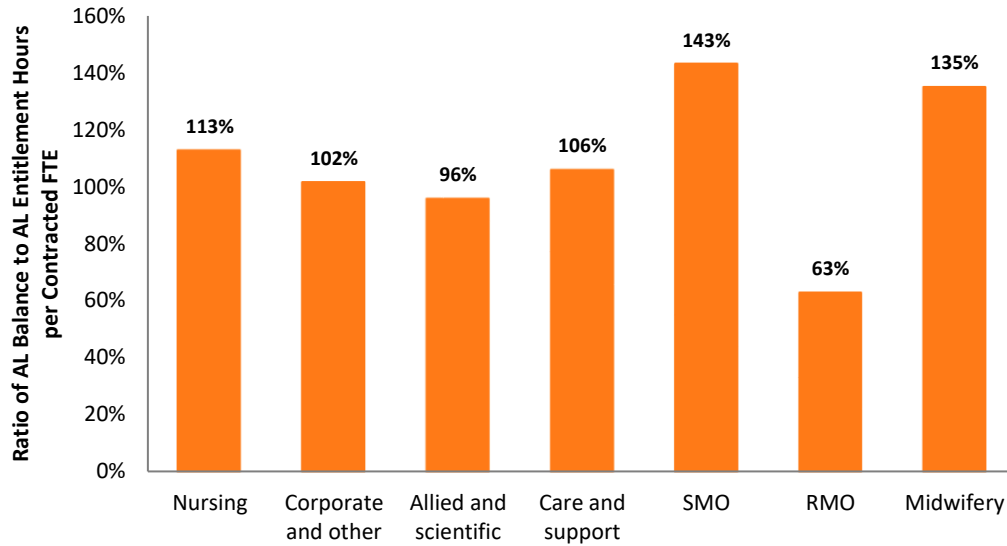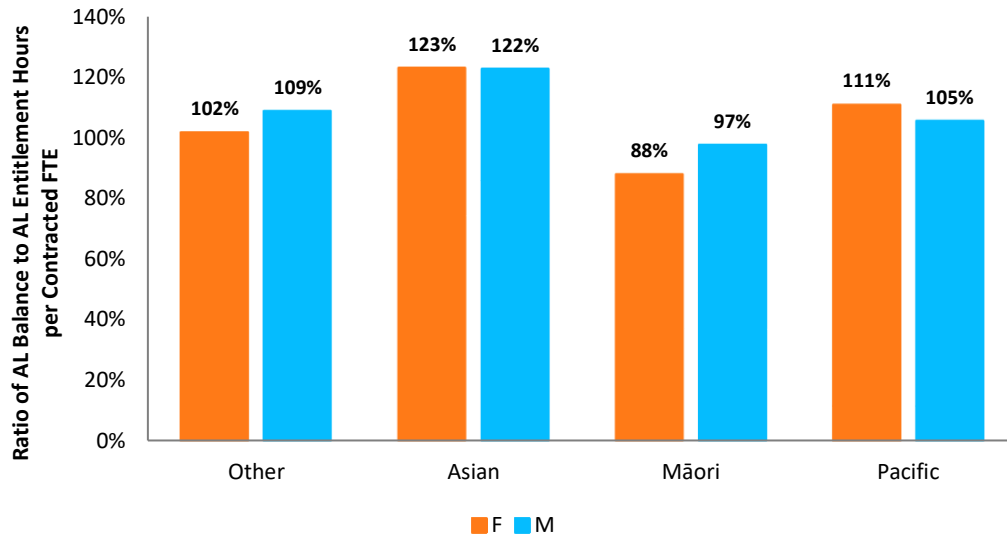

Figure 16: Ratio of annual leave balance to annual leave entitlement hours per FTE by ethnicity by gender

ANALYSIS BY POPULATION

DISTRIBUTION OF OVERALL DHB EMPLOYEES BY AGE, WITH NATIONAL EMPLOYEE DATA

The following chart shows the distribution of ages of DHB employees (histogram with light orange outline). The DHB employee distribution is on a position basis. The staggered dark orange line is the distribution of all New Zealand employees for the June 2021 quarter as reported in the Household Labour Force Survey (HLFS) by Statistics New Zealand.

Figure 17: Distribution of overall DHB employees by age, with national employee data
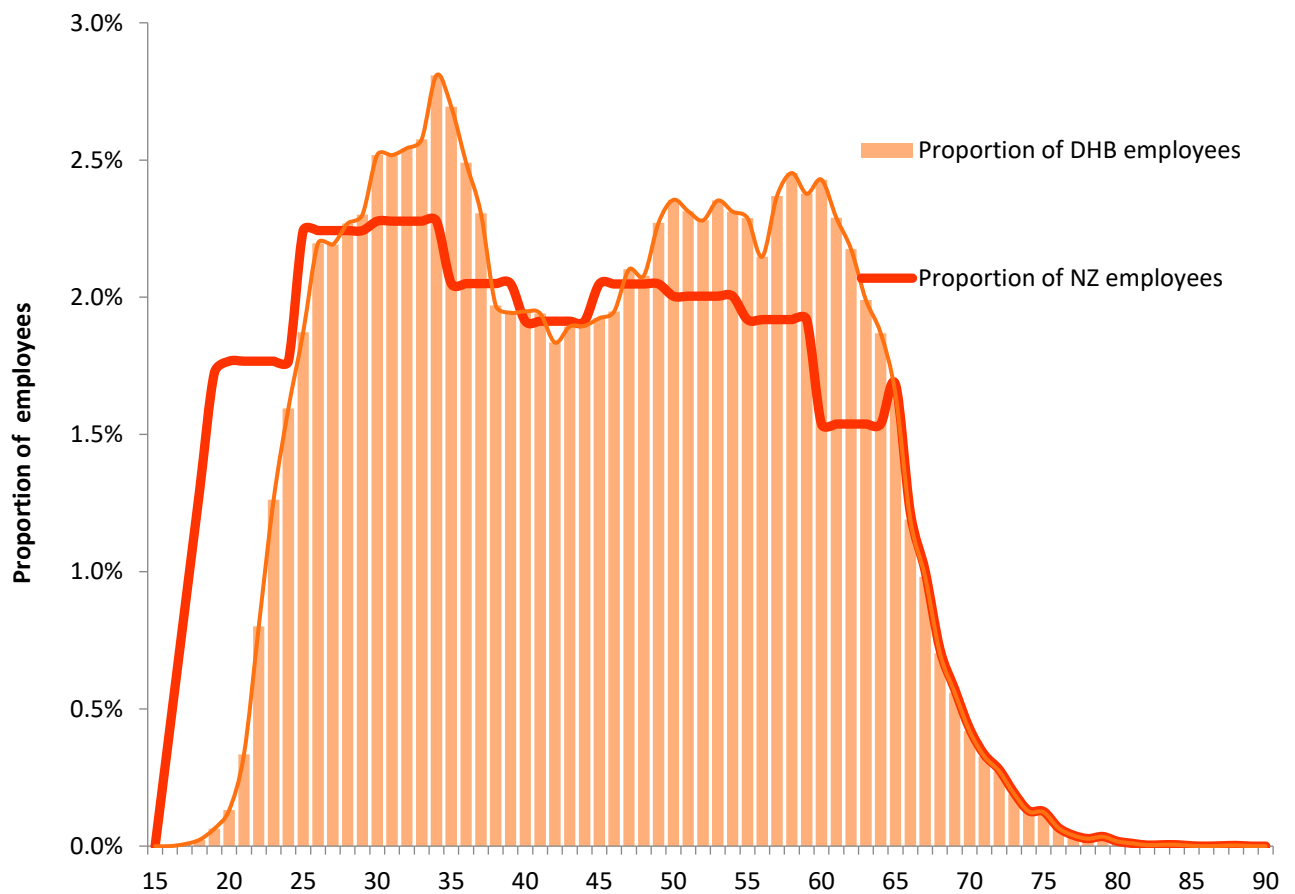
ETHNIC REPRESENTATION OF WORKFORCE TO RESIDENT POPULATION

The following charts look at the ethnic representation of DHB staff to the resident population.

The calculations look at the percentage of staff with a known ethnicity and compare it to the percentage of DHB residents with a known ethnicity. This latter data has been interpolated from data produced by Statistics New Zealand and is representative for the quarter being reported on. The proportion of staff with a known ethnicity this quarter was 96.6 percent, compared to 88.3 percent in June 2016. This comparison is on a position count level, as we do not have comparable distinct employee counts for 2016.

The four ethnicity groups used are: Other, Asian, Māori and Pacific – 'Other' is an amalgamation of all other ethnicities but is primarily European including the 'New Zealander' ethnicity. Throughout these charts this is the order of presentation.

When a bar on a chart is green it means the proportion of that ethnicity in the DHB workforce is greater than the population. If a bar is red then the proportion of the DHB workforce is less than that of the resident population. All charts use the same axis scale (as these are spark lines the numbers are not written against the axes), which range from -25% to +26% - so comparisons between DHBs are possible. The data for 2016 has also been added to show any changes over the last five years.

It is important to note that some DHBs have very small counts by ethnicity; for example West Coast has fewer than five Pacific employees. This means the data can be quite volatile. Also, those DHBs that are heavily weighted towards a particular ethnicity in their population such as Pacific people in Counties Manukau or Māori in Waikato, will tend to show greater deviations between the DHB workforce ethnicities and the resident population.
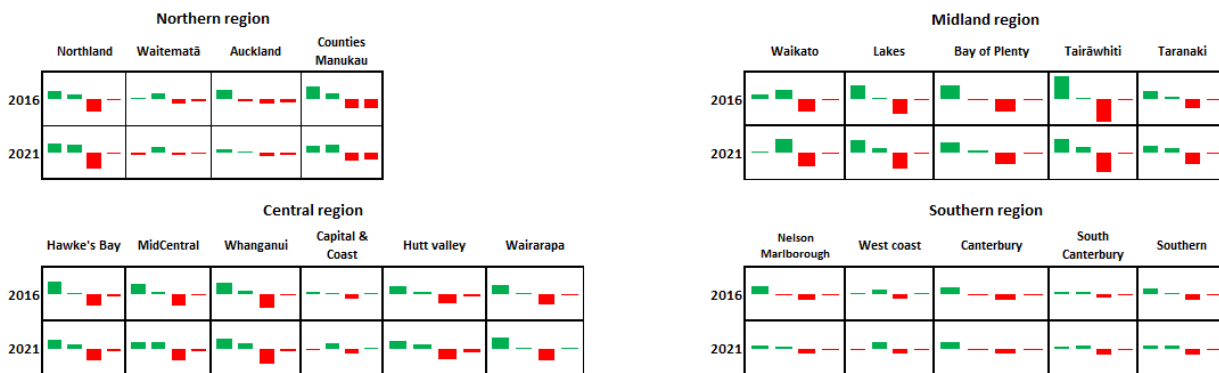
Note: The four bars are ordered as: Other, Asian, Māori and Pacific

For some DHBs the ethnic distribution of their staff closely mirrors that of the resident population, such as Waitematā. Overall, the distributions have changed only slightly between 2016 and 2021; the 'Other' ethnicities have reduced closer to zero (from one down to negative three percentage points difference), whereas Māori and Pacific have less under-representation (from negative six to negative three, and negative two to negative one, percentage points difference, respectively).

POPULATION DENSITY BY OCCUPATIONAL GROUP AND DHB

This section looks at the number of staff per resident population. Staff numbers are contracted FTE figures and they are compared to every 100,000 resident population. Midwives has been compared to the fertile female population (aged 15-49). The important factor to consider in this section is that each DHB may have different models of care (the way services are delivered to the population). For example, only six DHBs provide radiation therapy services, so they may appear to have more staff per head of population but they are actually serving the population from many other DHBs.

Figure 18: Population density of Nurses by DHB

FTE Nurses per 100,000 population

National average

492.9
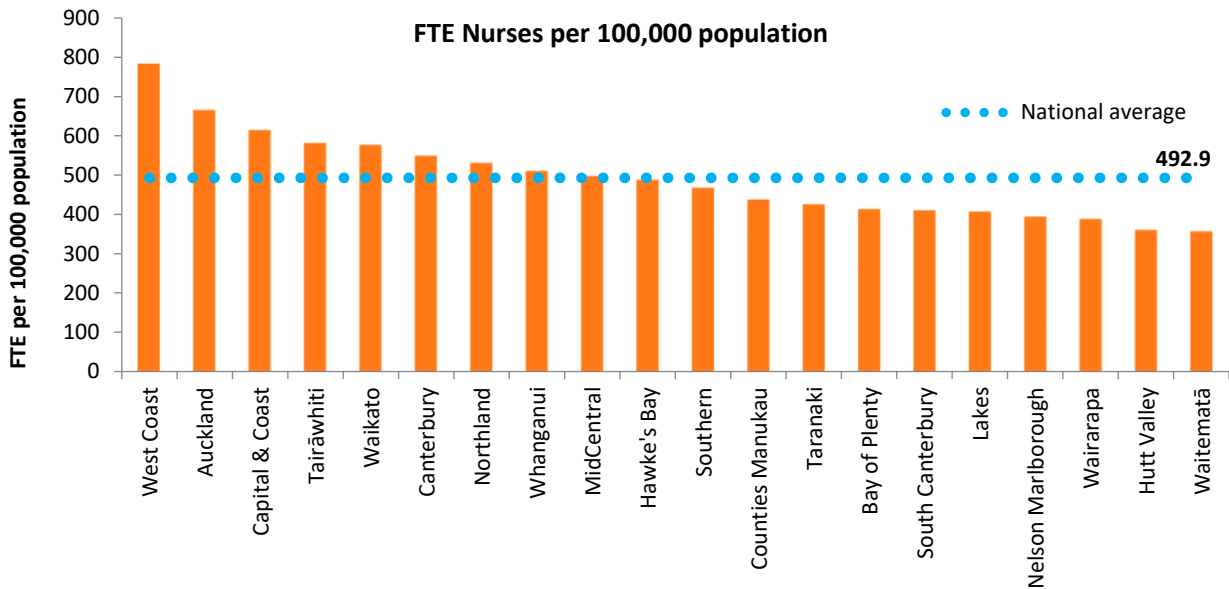
Figure 19: Population density of Corporate & Other by DHB

FTE Corporate & Other per 100,000 population

National average

292.6
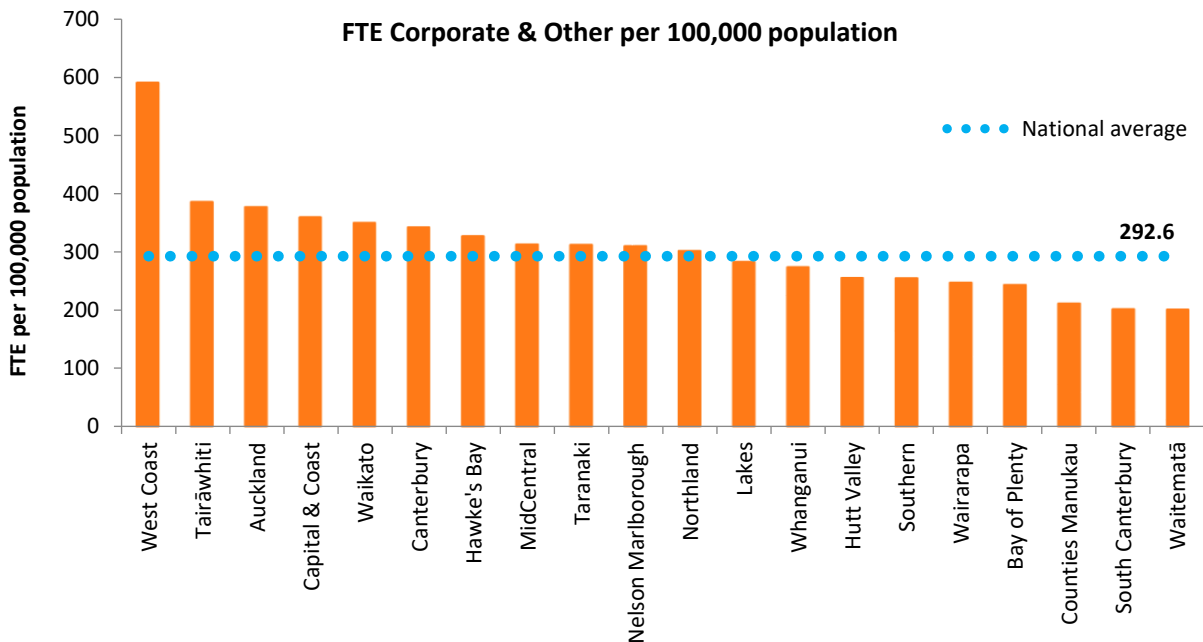
Figure 20: Population density of Allied & Scientific by DHB

FTE Allied & Scientific per 100,000 population
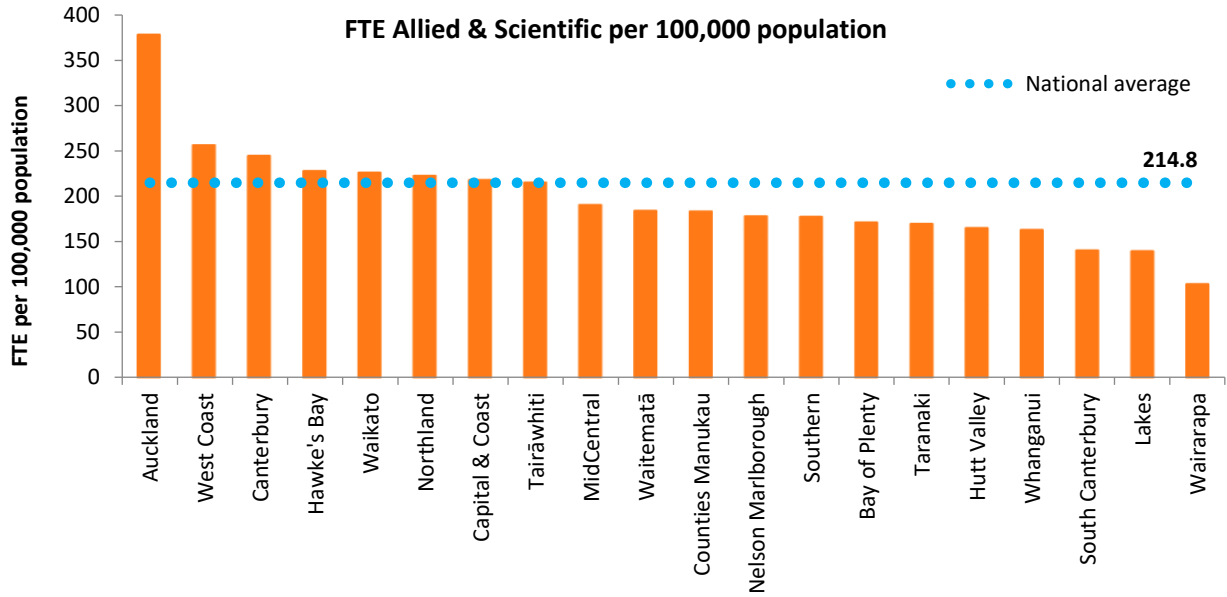
Figure 21: Population density of Care & Support by DHB

FTE Care & Support per 100,000 population
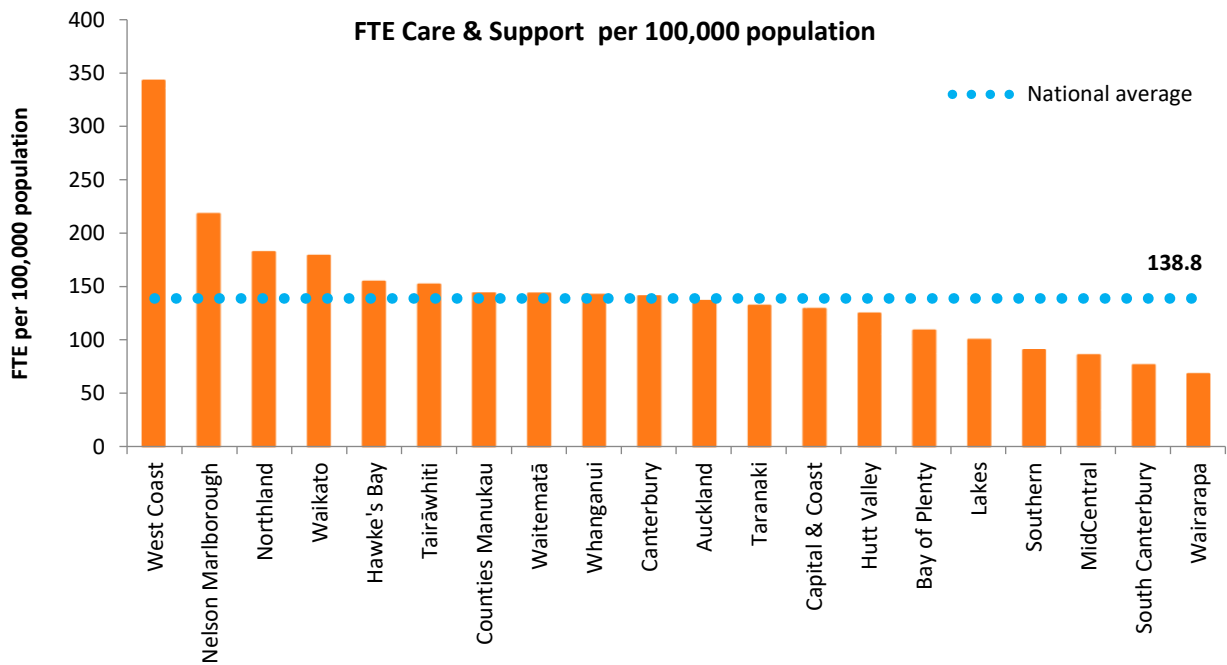
Figure 22: Population density of Senior Medical Officer (SMO) by DHB

FTE Senior Medical Officer (SMO) per 100,000 population
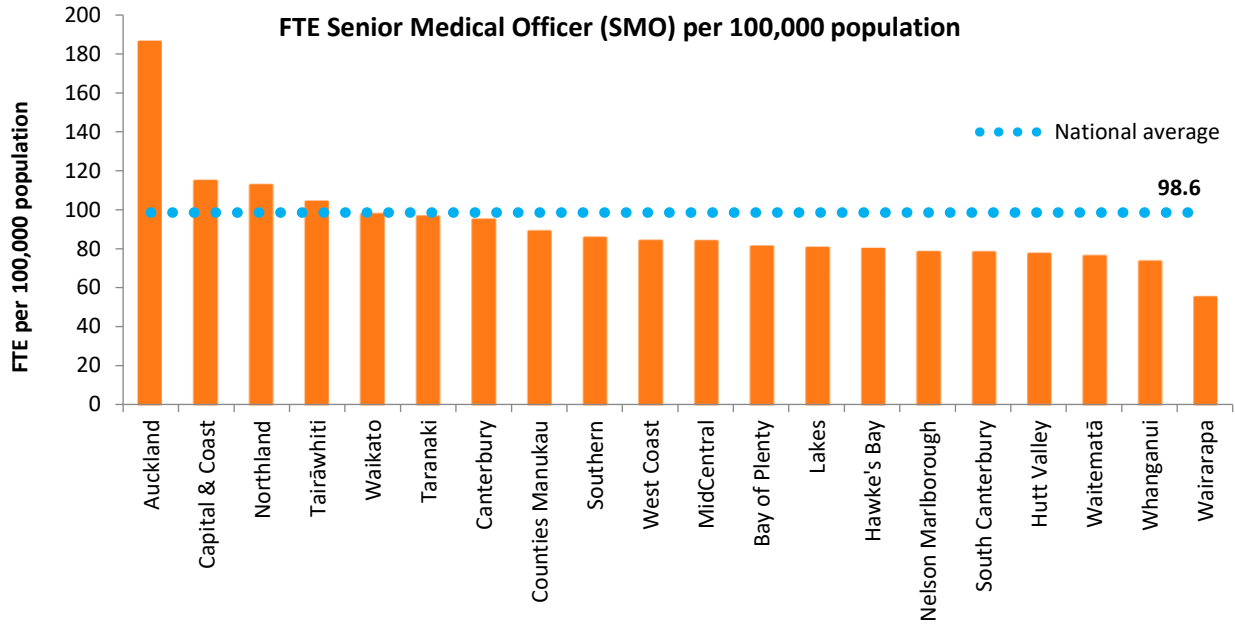
Figure 23: Population density of Resident Medical Officer (RMO) by DHB

FTE Resident Medical Officer (RMO) per 100,000 population
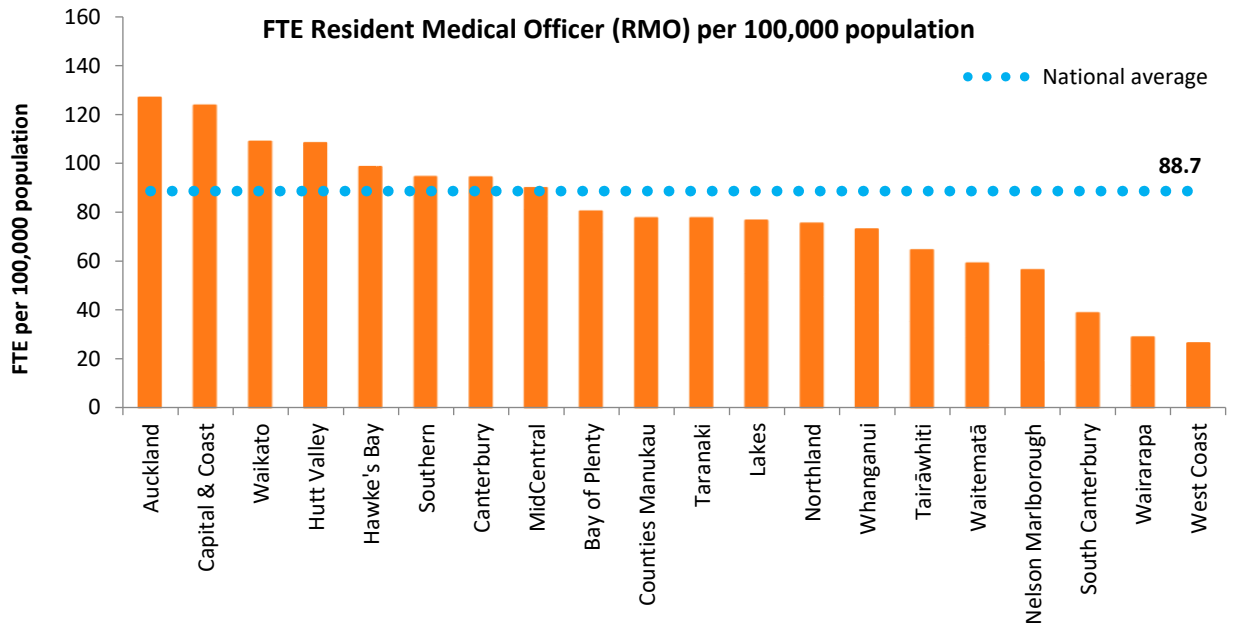
Figure 24: Population density of Midwives by DHB

FTE Midwives per 100,000 population (Female aged 15-49)

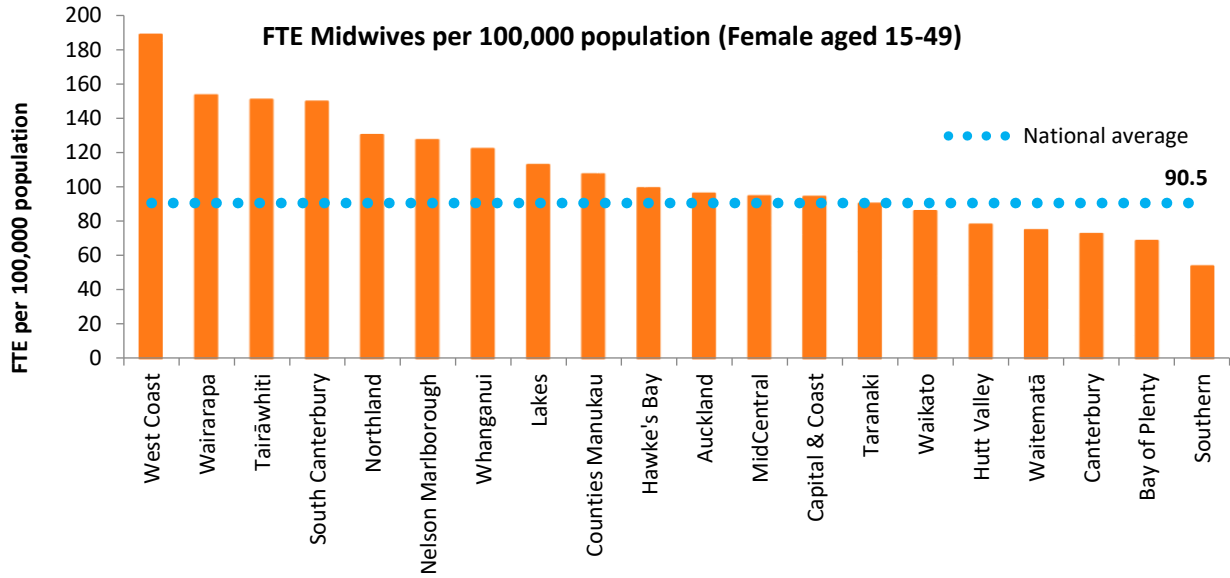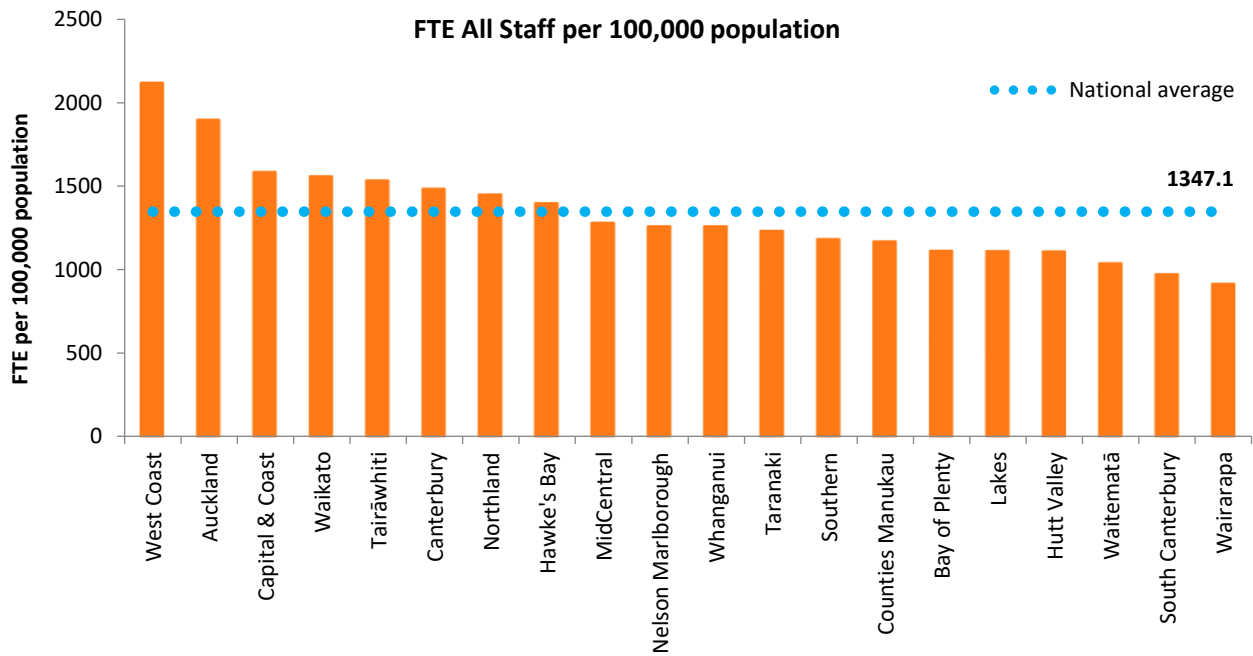**Figure 25: Population density of all DHB staff by DHB**

FTE All Staff per 100,000 population